Are retrofitted social houses sufficiently reflecting the holistic health and wellbeing requirements of older people?

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ARE RETROFITTED SOCIAL HOUSES SUFFICIENTLY REFLECTING THE HOLISTIC HEALTH AND WELLBEING REQUIREMENTS OF OLDER PEOPLE?

Energy efficiency improvements require robust decision-making processes due to their complex and demanding interconnections, and the associated impacts to health and wellbeing. This is of particular importance to the elderly population with regards to the requirement for integration within the social care agenda and the known vulnerabilities to their immediate and surrounding environment. The complexity of delivering this agenda through a social housing focused strategy requires holistic integration across a range of service providers on a multitude of complex factors. A need is emerging to examine the relationships between energy, health and housing sectors to determine and understand the appraisal procedures in social housing and the unintended consequences that can arise. This research presents the findings of a preliminary study through a series of in-depth interviews conducted with key stakeholders under a constructivist grounded theory approach, exploring the extent to which the requirements of an older person's health and wellbeing are holistically being addressed during the retrofit of social housing. By exploring the findings through the lens of Foucault's theory of governmentality it was determined that the ideological barriers within governance prevent a holistic retrofit process and inhibit the potential to create collaborative decision-making across public services.

Keywords: Ageing population, decision-making, energy efficiency, social housing, strategic collaboration.

INTRODUCTION

Due to economic growth and advances in health care, people are living longer than ever, with 25% of the population in Europe expected to be over 65 by 2020 (Boerenfijn et al. 2018). Within the UK's fuel poverty strategies, the elderly, alongside low income families and disabled people, are recognised as the most vulnerable within society (DECC 2015). An ageing population poses great challenges in terms of providing appropriate housing facilities and creating sustainable living environments. Furthermore, the poorest and most marginalised individuals tend to be those living within the most inefficient, lowest quality of housing and have the least power or resources to invoke change (Krieger and Higgins 2002). This paper presents the first phase of research undertaken to evaluate the success of collaborative efforts within government to perform domestic retrofit practices for health and energy efficiency. The ageing population in the UK is presenting great challenges and there is a need to examine the processes and expertise available within the housing, health and social care sectors, as well as within the construction industry to better understand the consequences of the current retrofit agenda on the health and wellbeing of the elderly. Presented are the findings of an analysis of nine stakeholder expert interviews through

a constructivist grounded theory approach determining the short comings and requirement of a holistic approach within governance for the retrofit agendas.

LITERATURE REVIEW

The importance of housing

Housing holds a fundamental relationship with mental health, creating either long-term security or insecurity; impacting social cohesion, trust, a sense of belonging, and therefore, the wellbeing of an individual (Bullen et al. 2008). It has become an area of policy development which often cuts across a number of government ministries and departments, with the provision of decent housing overlapping welfare, health and social support (Imison et al. 2017). Since the 1990s, supporting the elderly to retain independence in their homes has become prevalent in policy; such as the Shifting the Balance of Care agenda which seeks to provide a tailored service repositioning care from hospitals to individuals homes (Imison et al. 2017). However, the lack of suitable and accessible dwellings is acknowledged to be a future challenge. Whilst there are different forms of sheltered housing and care facilities available, they are presented as a final resort instead of their own houses when the individual's health and wellbeing are considered to be at risk (Vasara 2015; Van Leeuwen et al. 2014).

In the UK, social housing is generally divided into two main categories: council housing organised by the local authority and not-for-profit housing association dwellings (Kenneth et al. 2016). Whilst new build construction is able to consider the diversity of future residents, the existing building stock must be flexible to changing health needs whilst also supporting the environment (Boerenfijn et al. 2018). Social housing must meet the needs of the vulnerable on a continuous basis, whilst simultaneously considering environmental requirements to create and maintain sustainable retrofit practice. To achieve sustainability, there must be an understanding that human health and the environment are two inextricably linked components that support one another.

Ageing population and the need for adaptation

As people age, declining mobility and illness related to ageing can mean that their residence is no longer suitable without support or adaptation; forcing individuals to either move into specialist accommodation or have adaptations which often they cannot afford. Ageing in place, or "*the ability to live in one's own home for as long as confidently and comfortable possible*" is the ability to be self-reliant at home for as long as it is viable (Shelter 2007). Housing adaptations have the ability to empower individuals by allowing independence and creating accident prevention, whilst reducing hospital and care home admissions and delays (Adams and Ellison 2014). Moreover, major adaptations such as the installation of a wet room or the lowering of structures within a home can have a significant impact on the quality of their life and their wellbeing (Wane 2016). However, the Older People's Commission for Wales (2015) found the UK's current housing standards are below acceptable levels, with 23% of the elderly believing that they require social care retrofits in their homes. Moreover, Age UK (2014) estimated that there were 1,004,000 people aged over 65 (10.35%) with unmet social care needs in England. These figures display the extent of the problem and highlight the need for improved governance in order to secure independence and comfort within the elderly's homes. The elderly are more likely to spend a greater amount of time in their homes than other age groups, estimated at between 70-90%. Consequently, the environmental conditions these individuals are exposed to are a key influencer of health. Older people are more vulnerable to the

effects of cold weather; this is partially due to pre-existing medical conditions and financial constraints meaning they are twice as unlikely to be unable to afford fuel in winter (Van Hoof et al. 2017).

Environment and energy efficiency

In 1997, the Kyoto Protocol brought energy efficiency to the forefront of political agendas, intended as a means of reducing CO2 emissions. However, since then, energy efficiency has seen other social consequences such as reducing winter deaths, fuel poverty and decreasing the incidences of cold related morbidity. Excess winter deaths are highest amongst older people and related to dwellings with low ambient home temperatures and ineffective energy initiatives (Clinch and Healy 2001). Fuel poverty is connected to poor physical health through a variety of pathways such as inadequate ambient temperatures, a deterioration of dwelling conditions through increased moisture content and having resource scarcity - through food or heating thrust upon them (Camprubi et al. 2016). The UK Government and devolved administrations have attempted to tackle this through the improvement of energy inefficient housing, reducing fuel bills and attempting to tackle low incomes. However, affording adequately warm homes is still problematic for older people, with nearly two thirds of single pensioners spending 18% of their income on fuel, with many still living in poor quality housing (Burholt and Windle 2006).

Joined-Up Government

Joined-up government (JUG) is the development and structural reorganisation of internal policy coordination to improve the efficiency of service delivery (Darlow et al. 2007). By simplifying the number of intermediaries, it allows greater collaboration between the state and society by reducing the complex landscape that confronts the population when accessing public services. JUG seeks horizontally and vertically coordinated thinking and action; removing undermining policies, better utilising resources, creating greater stakeholder collaboration and empowering the population (Pollitt 2003). This increased partnership allows the establishment of a more agile and responsive government based on a holistic methodology of action between partners and users (Darlow et al. 2007). However, due to historic investment there is a reluctance to disinvest or reorganise current structures (Hood 1991). The market-led response of new public management from 1985-2005 exacerbated the government's inability to develop and direct increasingly distant multi-agency arrangements that are target driven rather than cooperative (Pollitt 2003). By utilising a JUG approach, it draws more deeply on the establishment of shared problems and agreed solutions; improving conditions and responding directly to the needs of people. Furthermore, Foucault's (1982, 1991, 2007) concept of governmentality has the potential to provide an understanding around the challenges that this agenda faces by examining the strength of actions and mechanism that underline the decision-making within governance and will be explored through subsequent data analysis.

The need for collaborative retrofit practice

Whilst environmental health is closely related to, and affected by, socioeconomic status, public health research has given less attention to the complex relationship between housing and health within retrofit practice and the implications of this upon public health policy improvement (Willison 2017). Housing as part of health improvements is often implicit within policy and the evaluation of housing

enhancements, however, unlike health service interventions, the main aim of housing improvements are not improvements made to health. The complex relationship between poverty, poor housing and health creates difficulty in creating adequate control due to lack of understanding within social care and primary care of how housing conditions can cause poor health impacts (Thomson and Thomas 2015). With an ageing population, great challenges are presented to the healthcare system across the world regarding increasing acute and long-term requirements. There is a need to maintain and improve the elderly's mental and physical wellbeing, whilst lowering the cost for state and healthcare. Many social care and health experts within industry have confessed the lack of linkages with, and understanding of, planning within housing which has meant many older people's need have not been considered or prioritised (Zhang et al. 2018). Therefore, policy makers and practitioners have an opportunity to address a key social detriment of health through housing, with wide reaching implications for health and social care across Scotland and the UK.

METHODOLOGY

The aim of this study is to explore the extent to which retrofit practice within social housing holistically meets the health and wellbeing requirements of an ageing population under a constructivist grounded theory (C-GT) approach. The results presented from this initial phase will provide a base for the second phase of research which seeks to widen the sample through further interviews. This research takes an exploratory approach to understanding with a view to allowing compilation of recurring observations and data to help shape the later stages of research.

Methodological Approach

Grounded theory is defined as the inductive conceptualisation of data through a systematic, constant comparative method of simultaneous data collection and analysis to establish theory (Charmaz 2014; Glaser and Strauss 1967). In selecting which variation to use, the philosophical and practical approach of both classical and constructivist were considered for this research. Classical grounded theory is often defined as positivist; seeing the researcher as independent from the participants (Glaser and Strauss 1967). Conversely, within constructivist grounded theory, the researcher is central with their participation and seen across data collection, analysis and theory construction creating a relativist and pragmatic approach towards the methodology (Charmaz 2014). Within classical and constructivist, data collection and analysis are systematic and iterative, limiting theory generation until themes and relationships are developed (Charmaz 2014; Glaser and Strauss 1967). Strauss and Corbin (1990) argued for professional literature to be reviewed before data collection begins and throughout analysis and theory generation, however the researcher was to remain objective, whilst Charmaz (2014) saw an abductive process where the research becomes active. When grounded theory is combined with a constructivism paradigm, it embraced the existence of multiple individual realities; ensuring meaning is co-constructed to produce an interpretation adept in explaining these realities. Having considered both approaches and the requirement for philosophical compatibility between researcher and methodology, constructive grounded theory was selected. Due to constructivist's abductive reasoning, creating a logical inference to find the most likely explanation from data presented and its allowance to create greater flexibility in the methodology, with a more literary writing style whilst upholding the analytical process of formal research.

Approach

In line with the methodology, sampling was purposeful. Participants were aged 26-67 years with at least three years' experience in the industry. In total 9 industry experts gave written consent to participate; their demographic details are shown in Table 1. The initial participants were selected for their experience and ability to reflect on the interconnections between different retrofit practices amongst service providers. In line with C-GT, theoretical sampling began when early concepts and categories emerged, with adaptation of interview questions and adding additional participants to explore gaps in the developing categories (Charmaz 2014).

Table 1: Interview participants

Code	Gender	Stakeholder	Position
C1	Female	Energy	Area Based Scheme Researcher
C2	Female	Health	Nurse
C3	Male	Government	MSP
C4	Male	Energy	Eco Support Manager
C5	Male	Built Environment	Architect
C6	Female	Built Environment	Housing Association Manager
C7	Male	Government/Energy	MP
C8	Male	Energy	Director at Energy Action Scotland
C9	Male	Government/Health	MSP

Data was collected through one to one in-depth interviews. A neutral approach was taken, ensuring no leading questions were asked. Each interview began with the same opening question, "*What do you believe are the biggest issues facing housing with an ageing population?*". Initial interviews were open and free-flowing to give participants the freedom to discuss their experiences, with follow-up questions asked when showing statements were made that required further analysis. Later interviews were driven by data analysis and theoretical sampling to expand categories and relationships between them. Interview transcripts were coded word-by-word, then line-by-line, using gerund verbs to stay close to the data (Charmaz 2014). Initial coding involved categorising each line of the written date, initial codes were integrated and refined to develop concepts, categories and sub-categories. Initial coded transcripts underwent focused coding using NVivo software to develop the relationships and build categories into conceptual themes. Moving from initial to focused coding, allowed generation of the senses and processes that occurred from the narrative. Throughout this process, theoretical memoing was undertaken, enabling theoretical development and deeper understanding of the data.

DATA ANALYSIS

From analysis, three main categories arose, 'misaligned decision-making', 'disjointed collaboration' and 'changing perceptions'. Through data analysis, the concept of governmentality emerged as a concept. Due to the abductive nature of C-GT, patterns and ideas were identified and investigated through literature. From this, the potential for governmentality as a lens to analyse the data was uncovered due to the processes and decision-making within governance which impact the structures and viability of progressive change across housing, health and energy.

Misaligned decision-making

Lack of understanding

It is suggested that a potential lack of comprehension of energy efficiency procedures exists amongst social care professionals. Within health, there is an understanding of the relationship between home and happiness and the potential health impacts resultant from adverse environmental conditions. However, this statement from C2 is indicative of a wider problem of deficient knowledge or understanding of energy efficiency improvements, "*there are none, I don't know of any. I don't know of any at all*". This statement creates two questions: if the industry as a whole lacks awareness of basic energy enhancements or if this particular professional is disconnected from the industry; arising from a lack of resources to afford the services or a general lack of implementation knowledge.

Reduced funding

Intellectual connections between the two industries is further constrained by budgetary cuts, as C3 states, "*everyone is given a job to do and a budget to do it in, which are declining…therefore people don't think outside the box…your concern is day to day health. Is it their heating is working? Probably not*". C3 reinforces this issue by commenting that, "*one would like to think there is a joined up approach being taken but I can see why it doesn't, these people feel rushed off their feet because they have more to deal with than they can cope*". This demonstrates the increasing pressure within healthcare, restricting intellectual and proactive connections being made across industry. It prevents optimum improvements being made and impedes widening the field with a greater breadth of knowledge and skills. It displays an understanding that progressive change through collaboration is beneficial, but also a contradictory stance, through a feeling that it is unrealistic and idealistic. This is particularly interesting, as C3 represents the government which in principle is in control and has the power to invoke this change.

Disjointed collaboration

Disconnect of reality

An unexpected theme which arose through analysis reflected a lack of awareness in government of the realities of the construction industry in relation to retrofitting houses. C7 understood, "*I think common sense would prevail…I think the health visitor should know and I am sure would know who to contact, if the first person they contact was not the right person, they would continue to find the right person who could make that house more energy efficient*". Representing not only a misunderstanding but an apparent detachment of the reality of the pressure social care feels from budgetary constraints. Contrastingly C7 reported *"there is an understanding that need to be done, I wouldn't go as far to say it's all connected up*" and C4 observed "*I'd imagine a social worker might pick that up and raise it as a concern but I don't think it is entirely dealt with*". These differing understandings relating to the level of efficacy and successful interconnections between health and energy showcase that there is little understanding of the extent of the problem and the degree of separation currently present within the current model of public services.

The need for change

Stakeholders displayed an understanding of the gaps within implementation and the requirement for greater levels of collaboration as C9 stated, "*if you said to them and asked the question, they would say yes but that is a different thing to doing it in your*

day to day" with C5 reinforcing that, "*health care sees the effects but won't necessarily understand the mechanisms and the interconnected chain of dependence…it's too long and potentially fragmented for that connection to happen*". These statements display an understanding that there are fundamental barriers to succumb which require transformation at a macro level in order to increase awareness and understanding of the relationship between health and energy within industry to create hands-on, enshrined knowledge between health and housing.

Changing perceptions

Shifting mind-sets

Although earlier discussion queried the lack of understanding within social care workers, it is proffered that they would go out their way to make positive change, "*sometimes we are the voice, no we are the voice for the residents…it is us that needs to do something…doing this interview gets you thinking gosh these things could be getting done and who do you go to? I don't know but I am going to find out…they need to be looked at together so it's not one leaving it to another for somebody else to sort out*". The social care profession and those who work within it are focused around improving the health of others. This statement demonstrates a clear desire and a personal responsibility to do more, seeing it as their duty to make great positive changes within other's lives and within the industry. However, this view is one individual and will require further investigation to explore if it is representative of the wider social care sector.

The benefits of collaboration

These improvements to public services have the potential for much wider implications for the state. Throughout, the implications for holistic collaboration on primary health care was discussed, such as C4 acknowledging, "*the danger would be discharging someone into a cold house and coming back in, then you get more bed blocking, whereas that could have been avoided with energy efficiency*", C5 commenting "*discharged from hospital and returning too soon because the conditions they are returning to are actually aggravating the very thing they were first admitted to hospital to be treated for*" and C8 reinforcing this statement, "*this could be a public health issue…you put someone into a warm, dry home then think of it as preventative medicine*". These statements were derived from three different experts within energy and the built environment. This illustrates a vital understanding of potential impacts for the NHS and displays a greater degree of knowledge of the benefits, emphasising the requirement to strengthen collaboration across the key stakeholders within health and energy retrofit practice.

Discussion

Government occupies a unique position within health and wellbeing. Through policies and regulations they shape the economy, environment and society for both the current and future generations. Therefore, there is a need to ensure that these policies are progressive to protect the health and wellbeing of the population. Through data analysis, the diffused structures of government coupled with the government's neoliberal ideological approach, displayed a strong disconnect of collaboration and knowledge share between health, housing and energy services. With regards to Foucault's view of governance through the concept of governmentality, there is a requirement for the power of knowledge to be passed down to an individual level to successfully enforce change and create independence from state. Governmentality was not restricted to state, but applicable to all institutions governing social life. It is

prepared to concede certain levels of autonomy to individuals, groups and populations to reduce costs and maximise personal freedoms and responsibility (McKinlay and Pezet 2017). Until the 17th century, state exercised power in the form of a right over both life and death of the population, but did not consider maintenance of life as an aspect of its duties (Foucault 2007). Later Foucault affirmed a new sort of power; the need to care for the maintenance of life and therefore, the wellbeing of population. Population became the most valuable national resource and thus the centre of attention (Guizzo and de Lima 2015). Whilst health care has not been privatised in the UK, new organisational forms have emerged with weaker command and control power. Loosening control is apparent through various areas of health care and housing, mixing accountability with professional self-regulation; operating internally at a micro level, but with decision-making and economic prioritisation operating largely at a macro level (Ferlie et al. 2012). Furthermore, Governmentality refers to a particular power/knowledge nexus which is associated with neoliberalism. Within this research it became clear that the current neoliberal socio-economic model prioritises a calculative rationality and establishes instruments to secure increased economic growth, and that this has inhibited the relationship between retrofit practice in public service (Schweber 2017). The establishment of new public management, coupled with fiscal restraints in public services and a target-driven culture that is reluctant to take on institutional responsibility. This results in a lack of collaboration on all levels which inhibits the capacity to take on the joined up approach which JUG strives for and potentially creating greater societal dependency through increased reliance on key resources such as the NHS.

As Foucault discussed, if the understanding of energy efficiency was seen by industry and population alike as ‘preventative medicine, the "power of public opinion" would create a normalised practice, which is monitored, protected and promoted by public judgement. Nonetheless health is not, and should not, be seen as the sole responsibility of the health ministries. Government must balance the requirements of the population today, whilst responding to the evolving challenges of maintaining and caring for an ageing population in the future. Government can enforce significant change, enabling a shift from management of the delivery of single sector services, to a much broader, more inclusive agenda. However, this requires strong leadership centrally and locally. Governments across the world are going through severe financial constraint but it is of optimal value for the state to ensure health and wellbeing is considered consistently and coherently in every domain of government (Hunt 2012). There is an initial requirement for greater investment, however there is potential for long-term savings from reducing pressure on key assets and balancing consignment across different bodies through an approach of joined up governance. Therefore, in line with Foucault (1982), converting strategy into an open-ended communication is necessary if the concept is to travel across different types of institutions, but it requires analytical clarity, organisational coherence and clear practical routines. Thus, there must be understanding and acceptance that health, housing and energy all have the potential to improve and promote good health, stimulate change and promote resilience through the retrofit industry.

CONCLUSIONS

There is a requirement for greater collaboration and communication within national retrofit agendas to protect the wellbeing of the elderly and prevent unintended consequences arising. Significant change must occur within government structure;

increasing flexibility and alliances to create a means of viable interaction and collaboration to create solutions and improve implementation throughout the system. Whilst housing, energy and health may share features of neoliberal techniques such as the reliance upon outcomes to determine success, the inability to easily quantify collaborative practice renders a move towards a joined up approaches to retrofit practice futile within the current governance paradigm inhibiting the prospect of increased investment. However, with people continuing to live longer and with the maintenance of the existing housing stock remaining the dominant response to meet pressure on resources, a change in mind-set is required which recognises the value of investing in collaborative approaches. Key areas of future research include the exploration of the structural barriers within governance that prevent holistic collaboration from occurring; investigating the cultural, knowledgeable and economic restrictions currently in place. By studying the level of knowledge and comfort within healthcare regarding energy efficiency methods, it allows for increased understanding of the current comprehension of sustainability literacy amongst stakeholders and service providers. This would create a basis to determine the level of progress and solutions required; such as CPD, a restructuring of current higher education course content or determine if the best course of action is the creation of new jobs or fields. Furthermore, there is a need to examine the current infrastructure between housing and health sectors that allow for a collaborative retrofit approach, through investigation of practice in place and the viability of the development of a framework to permit a holistic approach between various stakeholders.

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